Climate Change and Carbon Emissions

Georgia Power recognizes that climate change is a longterm, global issue that should be addressed with a corresponding long-term, global plan.

The climate issue is related to the increases of "greenhouse gases" in the atmosphere, such as water vapor, carbon dioide (CO2), methane, chlorofluorocarbons and others. These gases contribute to the "greenhouse effect," a natural phenomenon that traps the sun's heat and helps maintain a stable temperature. Without this effect, Earth would be a cold planet. Water vapor is the most common greenhouse gas, contributing 95% of the world's warming.

Georgia Power recognizes there are concerns about our emissions of CO2 and the impact those emissions may be having on the climate, as well as how those emissions might impact the economic future of the company.

So, can we reduce carbon emissions?
We strongly believe so, in time, with developing technologies and reasonable financial impact. The technologies are not there yet, at least not economically. Capturing carbon emissions with current methods would increase generation costs 70% to 100%, according to the Department of Energy, including the transportation and disposal of the CO2 emissions.

So what are we doing?
In the near term, all our new generation is state-of-the-art, high efficiency natural gas, which has half the carbon emissions as coal generation. Our parent company, Southern Company, is also focused on advanced coal technology and developing alternative forms of providing energy. In addition, Southern has entered into a partnership to support the DOE's FutureGen effort, an initiative focused on designing, building and operating a near emissions-free electric generation facility that uses coal as its fuel source. The result will be a 275-megawatt prototype plant used to test new clean power, as well as carbon capture, carbon sequestration and coal-to-hydrogen technologies.

Southern also continues its effort through DOE's Power Partners program, which seeks to reduce the growth of CO2 emissions. Some of the initiatives include carbon sequestration through tree planting, research into biomass, fuel cells and zero-emissions technologies, as well as carbon capture and storage.

A key step in transitioning to the next generation of energy production is finding those non-fossil fueled options that can provide reliable, affordable electricity to our customers. Switchgrass as a renewable biomass fuel looks promising, as do recent advancements in wind energy. Along those lines, we are testing the interest of our customers in supporting green energy through programs that will give customers the choice of purchasing energy from renewable sources.